

to the islands in the lower part of L^och Lomond, and occupies much of the sea-coast to the Frith of Tay. Red sandstones border the northern flanks of the Lammermuir Hills, expand in the vale of the Tweed, and margin the slate tracts of Dumfries-shire and Kirkcudbright. Arran, Bute, Cantire, and the coast about Largs and Ardrossan, show the same formation.

In England, the carboniferous system of rocks is widely expanded. Old red sandstone appears in the parts adjacent to the Tweed, often associated with the lower beds of limestone into a transition group: it is seen along the line of the Penine chain about Dufton; and appears in the lake district at the base of Ulswater, in the valley of the Lune, and other parts. It is developed enormously in the counties of Hereford, Monmouth, Brecon, Carmarthen, and Pembroke; but is slightly exposed in connection with the limestone of Mendip, Bristol, and Wickwar.

The mountain limestone formation occupies an immense tract in Northumberland, Durham, and Yorkshire, from which country it runs out in a curve, to encircle on the north, and partially on the south, the group of Cumbrian slate mountains. It also appears in great force in Derbyshire; ranges through Flint and Denbigh, to St. Orme's Head and Anglesea; shows slightly round the Clee hills in Shropshire; and presents picturesque cliffs on the Wye, near Monmouth. There is a long belt of mountain limestone on the north and east sides of the coal fields of South Wales, from Narberth by Abergavenny to Caerphilly; and it is prolonged on the south side by Bridgend, Swansea, and Tenby, to Milford Haven. Detached masses of limestone appear about Bristol, and in the Mendip Hills, and, according to Messrs. Murchison's and Sedgwick's recent researches, the limestones of Barnstaple may be of the same age.

The carboniferous limestone is supposed to occur in a narrow band below the coal formation of the Clee hills, and this is probably the correct explanation of the phenomena visible under Knowle hill, at Orelton, &c.: